ELSEVIER

Volume69, Numbers 1–2, Nov.–Dec. 1997

JOURNAL OF POWER SOURCES

Contents

Articles

The benefit of solid oxide fuel cells with integrated air pre-heater 1
P. Costamagna

Materials' effects on the elevated and room temperature performance of C/$LiMn_2O_4$ Li-ion batteries 11
G.G. Amatucci, C.N. Schmutz, A. Blyr, C. Sigala, A.S. Gozdz, D. Larcher, J.M. Tarascon

Orbital performance of AMPTE/CCE nickel–cadmium batteries with a large number of charger-induced, very small, charge/discharge cycles 27
R.M. Sullivan, C.G. Hoffman, G.M. Rao

Chemical, physical and morphological characterization of the electrodeposited iron fragile layer on aluminum substrate 37
I.A. Carlos, R.M. Carlos, C.S. Caruso

Conductivity of lithium imide in mixed aprotic solvents for lithium cells 41
E.J. Plichta, S. Slane

Cyclic voltammetry response of coprecipitated $Ni(OH)_2$ electrode in 5 M KOH solution 47
D. Yunchang, Y. Jiongliang, C. Zhaorong

Effect of alloying elements on the copper-base anode for molten carbonate fuel cells 55
E.R. Hwang, J.W. Park, Y.D. Kim, S.J. Kim, S.G. Kang

Thermal decomposition of PVB (polyvinyl butyral) binder in the matrix and electrolyte of molten carbonate fuel cells 61
J.J. Seo, S.T. Kuk, K. Kim

A method for evaluating the performance of positive electrode grids of lead/acid batteries 69
N. Koura, T. Sakaue

Development of porous carbon electrodes for direct methanol fuel cells 75
R. Ramkumar, S. Dheenadayalan, R. Pattabiraman

Preparation of manganese dioxide using Ag^+ ions as an electrocatalyst 81
W.S. Li, L.C. Jiang, Z.T. Huang

Using a pulse-current technique and measured resistance to evaluate the capacity of trickle-charged nickel/cadmium cells 89
N. Kato, T. Ogata, T. Hirai, H. Hirota

Investigation of graphite composite anode surfaces by atomic force microscopy and related techniques 97
K.A. Hirasawa, K. Nishioka, T. Sato, S. Yamaguchi, S. Mori

Collaborative investigation on charging electic-vehicle battery systems for night-time load levelling by Japanese electric power companies 103
T. Ikeya, M. Iwasaki, S. Takagi, Y. Sugii, M. Yada, T. Sakabe, E. Kousaka, H. Tsuchiya, M. Kanetsuki, H. Nasu, M. Ono, H. Narisoko, Y. Mita, K. Nishiyama, K. Adachi, T. Iwahori

The design and construction of high-performance direct methanol fuel cells. 1. Liquid-feed systems 113
M. Hogarth, P. Christensen, A. Hamnett, A. Shukla

The design and construction of high-performance direct methanol fuel cells. 2. Vapour-feed systems 125
M. Hogarth, P. Christensen, A. Hamnett, A. Shukla

The effect of alkaline earth titanates on the rechargeability of manganese dioxide in alkaline electrolyte 137
M. Kloß, D. Rahner, W. Plieth

Extraction of lithium from spinel phases of the system $Li_{1+x}Mn_{2-x}O_{4-\delta}$ 145
P. Endres, A. Ott, S. Kemmler-Sack, A. Jäger, H.A. Mayer, H.-W. Praas, K. Brandt

Elsevier Science S.A.

Short Communications

Rapid electrochemical characterization of battery electrode materials in the solid state 157
D.A. Fiedler, J.O. Besenhard, M.H. Fooken

Electrocatalytic activity of some metal phthalocyanine compounds for oxygen reduction in phosphoric acid 161
N. Phougat, P. Vasudevan

Foliated natural graphite as the anode material for rechargeable lithium-ion cells 165
K. Fukuda, K. Kikuya, K. Isono, M. Yoshio

Effects of lanthanum and neodymium hydroxides on secondary alkaline zinc electrode 169
J. Zhu, Y. Zhou, H. Yang

Patents Alert 175

Author Index of Volume 69 227

Subject Index of Volume 69 229

The publisher encourages the submission of articles in electronic form thus saving time and avoiding rekeying errors. A leaflet describing our requirements is available from the publisher upon request.